

REMARKS

Claims 1-3 have been amended, claim 4 has been cancelled, and new claims 5-21 have been added herein. Claims 1-3 and 5-21 are in the case. No new matter has been introduced.

Claims 1 to 4 as originally filed stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li (U.S. Patent No. 6,004,822) in view of Cowen ("Small is Beautiful" article).

Claims 1 and 3, as amended, feature a system in which a solid sample is retained at a surface region which is defined by one or more physical structures which aid retention of defined quantities of the solid sample. Neither Li nor Cowen teaches or suggests a surface region as claimed. In Li, the chemical compound is introduced into the chamber 17 (col. 7, lines 34-35), rather than being retained in defined quantities at a surface region as recited in Applicants' amended claims 1 and 3. Cowen provides no teaching which would lead the skilled person to contemplate modifying the device of Li in order to provide physical structures that would aid retention of the chemical compound at a surface region of the device.

Accordingly, Applicants respectfully request that this rejection be withdrawn.

New independent claim 10 specifies that the system includes a detector that is associated with the region for receiving the solid sample. This contrasts with Li, where the detector is not in any way associated with the region for receiving the chemical compound, i.e., chamber 17. Instead, in the Li device the detector 26 is connected to the chamber 19 which, as far as the solid chemical compound is concerned, is isolated from the chamber 17 by filter 9 so that the solid chemical compound cannot pass from chamber 17 to chamber 19.

One consequence of retaining the solid sample at a surface region using the physical structures recited in claim 1, and using a detector which is sensitive to the presence of solid sample at the surface region, as recited in claim 10, is that the removal of sample can be monitored by a detector using diffraction techniques to observe the changing diffraction effects arising from removal of sample from the surface region. This use of diffraction techniques, recited in claims 9 and 21, is neither taught nor remotely suggested in Li or Cowen.

Applicant : John Edward Andrew Shaw et al.
Serial No. : 10/030,040
Filed : January 7, 2002
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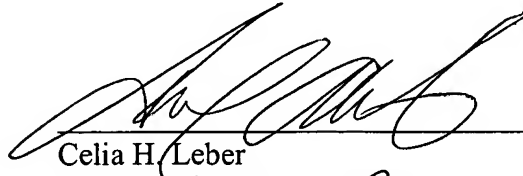
Attorney's Docket No.: 06275-
291US1 / DUF/JHU/Z70558/UST

Enclosed is a \$1,250 check for excess claim fees and the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 06275-291US1.

Respectfully submitted,

Date: _____

Filed 7, 2005



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